

Introduction

The Northern Shenandoah Valley Region is comprised of approximately 1,650 square miles encompassing the northwest corner of Virginia between the Blue Ridge Mountains and the eastern slopes of the Appalachian Mountains. Massanutten Mountain is located in the heart of the region. The north and south forks of the legendary Shenandoah River wind downstream and northward through the landscape and converge at the Town of Front Royal as the main stem of the Shenandoah River. The river continues northward in the lower valley to meet the Potomac River at Harpers Ferry, West Virginia, which then flows to the Chesapeake Bay.

The Northern Shenandoah Valley Region includes five counties, one city and 14 town governments: the counties of Clarke, Frederick, Page, Shenandoah and Warren; the City of Winchester; and the towns of Berryville, Boyce, Middletown, Stephens City, Luray, Shenandoah, Stanley, Edinburg, Mount Jackson, New Market, Strasburg, Toms Brook, Woodstock and Front Royal.

The region's economy is driven by a diverse blend of industry, agriculture and tourism. Since the area was first settled, agriculture has been a mainstay of the Shenandoah Valley. During the Civil War, the valley was described as the breadbasket of the Confederacy. More than 300 armed conflicts were waged in the region. With the planning and construction of Interstates 66 and 81 beginning in the 1950s, manufacturing in the valley became more diverse. Second home developments and an extended tourist season led to increased use of the Shenandoah Valley, generating economic benefits and attracting new local residents based on a rural quality of life with access to the Northern Virginia-Washington, D.C. metropolitan area. The large tracts of forests, national parks, numerous water resources, Skyline Drive, historic battlefields and other recreational and historic interests draw visitors from across the state, the nation and around the world.

The region's 2000 population was 185,282 people. The region's population grew by almost 16.4 percent during the past decade—a rate that exceeds the 14.4 percent statewide growth rate. Frederick County has had the most significant change in population, followed by Warren, Clarke, Shenandoah and Page. Most of the growth in Region 7 is due to in-migration.

The population for the region is anticipated to grow to 235,900 by 2020, representing a 16 percent increase in growth from 2005. Although much of the region is considered rural, Clarke and Warren counties are part of the Washington Metropolitan Statistical Area (MSA), and the Frederick County-Winchester City area grew large enough by 2002 to be considered its own MSA, separate from Washington D.C.

All of the counties rank agriculture as a primary land use, but economically, agriculture is not the primary income source. Many of the region's residents are employed outside their home jurisdiction in the Washington MSA. Increasingly, the Northern Shenandoah Valley's mountain and valley open spaces are giving way to development that is cluttering historic landscapes and causing a loss of the distinctive qualities of the valley. Commitment to an open space-based quality of life, the economic benefits of related recreational and historic tourism, and access to public lands and waters will enable citizens and local governments to maintain the Northern Shenandoah Valley's unique character and ensure economic viability in the long term.

Recommendations applicable to all regions are found in chapters III through IX. To meet needs established in the 2007 *Virginia Outdoors Plan (VOP)*, it is important to integrate these recommendations with those that follow for Region 7 into regional and local planning and development strategies.

Outdoor recreation

For a general discussion of outdoor recreation trends, issues and planning considerations in Virginia, see Chapter II: Outdoor Recreation Issues, Trends and Survey Findings, and Chapter VII: Outdoor Recreation Planning and Related Issues.

As indicated in the 2006 *Virginia Outdoors Survey (VOS)*, the three most popular outdoor activities in the region are walking for pleasure, driving for pleasure and swimming, respectively. Water related activities ranked high statewide. In Region 7, three water related activities are ranked in the top ten; swimming outdoors, sunbathing and fresh water fishing. There was a significant drop in participation rates in many recreational activities since the 2002 VOS. It was also found that the mean number of days of participation in many

activities declined, resulting in significantly fewer activity days of demand generated in each region. Statewide, the most dramatic drop was in bicycling, and the second largest drop was in lake, river and bay use. In Region 7, the largest drops were in walking, bicycling, driving for pleasure and golfing. Regional outdoor recreational activities that saw increases in activity days of demand were hunting, swimming, visiting historic sites and natural areas, fitness trail use, soccer and volleyball.

Despite the apparent abundance of certain types of recreational resources, shortages exist for close-to-home facilities that are important to local residents. Existing and projected facility needs for the region are summarized in Table X-7. For example, there is a need for additional active recreation facilities, especially basketball courts, baseball fields, and multipurpose fields for soccer and football. Many of the surpluses noted in the report are absorbed by imported demand from other areas of the state and the region. This is particularly true for hunting acres and other dispersed recreation activities that the national park and forest provide. Implementation of the region's *Walking and Wheeling Plan* could increase the number of miles of trails and roadways suitable for walking and bicycling. In addition, the continued promotion and linking of historical, scenic and cultural resources will attract tourism from those who enjoy visiting historic sites, natural areas, driving for pleasure and walking for pleasure.

All of the localities in the Northern Shenandoah Region are served by a parks and recreation department. According to the Commonwealth of Virginia Auditor of Public Accounts, *Comparative Report on Local Government Revenues and Expenditures* (year ended June 30, 2005), per capita spending on parks and recreation for each locality in this region was: Clarke, \$44.92; Frederick, \$53.02; Page, \$4.54; Shenandoah, \$16.80; Warren, \$30.31; and Winchester, \$78.68. This compares to a statewide per capita spending on parks and recreation of \$55.31, including \$85.51 from towns, \$43.75 from counties, and \$76.45 from cities in Virginia.

Although not all the jurisdictions in Region 7 have high populations of minorities, Shenandoah and Winchester City have high growth rates of Hispanic populations. With this as a consideration, and with the expectation that Hispanic and other minorities will increase, the following are recommended.

- Regional and local agencies should continue to better serve Hispanic and Spanish-speaking cultural groups by establishing trust relationships, hiring bilingual staff, advertising in the Spanish media, hosting Latino-themed events and creating programs

with input from the Hispanic community. Similar strategies are effective for other cultural groups.

- Due to the increase in cultural and ethnic diversity in the Commonwealth, local and regional agencies should consider making signs, literature and audio displays available in languages other than English based on the local population and user groups.
- State and regional agencies should place a high priority on providing recreation opportunities to the Commonwealth's urban and suburban population in close-to-home settings to allow for better access and to avoid overuse of facilities planned for rural populations.

Land conservation

A detailed discussion on statewide awareness of the need for conservation of farmland, parks, natural areas, and historical and cultural resources is found in Chapter III: Land Conservation. Conservation lands in the region are shown on Map 14.

Large acreages of public land protect open space in Region 7. Federal holdings include the Shenandoah National Park and George Washington-Jefferson National Forests (GW-Jeff National Forests) in the central and western portions of the region. The Appalachian National Scenic Trail (AT), located within Shenandoah National Park, is located along the eastern boundary of the region. Raymond R. "Andy" Guest Jr. Shenandoah River and Seven Bends state parks, state owned wildlife management areas, forests and other state resources contribute additional open space to the region.

Land Trusts and Conservation Programs Operating in Region 7

- Appalachian Trail Conservancy
- APVA Preservation Virginia
- Burwell-Van Lennep Foundation [Clarke County only]
- Chesapeake Bay Foundation
- Civil War Preservation Trust
- Department of Historic Resources
- Kernstown Battlefield Association, Inc
- Potomac Conservancy
- Shenandoah Valley Battlefields Foundation
- The 500-Year Forest Foundation
- The Nature Conservancy
- Valley Conservation Council
- Virginia Outdoors Foundation

Land conservation recommendations include:

- Regional and local organizations and agencies should support land protection efforts on priority lands, as identified by conservation partners in the region. Lands for protection may include those located adjacent to the Shenandoah River and its tributaries, national and state park and forest lands, other parks and natural areas, core battlefield areas, properties on the state and national historic registers, and state scenic byways.

Green infrastructure

Information about green infrastructure is found in Chapter IV: Green Infrastructure. Regional recommendations for green infrastructure include:

- Local and regional agencies should become informed and educate constituents about green infrastructure planning, including guidance on local zoning initiatives for changing community design and transportation systems.
- Regional and local governments should protect the management of watersheds by integrating watershed management planning with local land use ordinances and comprehensive plans.

Programs

The following recommendations integrate statewide program initiatives into responsive regional strategies for outdoor recreation and conservation. The statewide program areas addressed in this section include: trails and greenways, blueways and water access, historic and landscape resources, scenic resources, scenic highways and Virginia byways, scenic rivers, watersheds, environmental and land stewardship education, and the private sector. Recommendations are bulleted or numbered and are not sequenced by state or local priorities. Numbered recommendations are site specific to the regional map at the end of this section.

Trails and greenways

For more detailed information, see Chapter VII: Outdoor Recreation Programs and Initiatives, Greenways and Trails.

- National, state, regional and local organizations should recognize and respond to the growing demand for horse trails in the region. Various groups are developing trails and events to promote this activity.

- Regional and local agencies should implement the *Walking and Wheeling Plan* for the Northern Shenandoah Valley, which was adopted in 2004.

Statewide trunkline trails

1 The **AT** was designated by Congress and is managed by the National Park Service (NPS). The AT runs through the eastern portion of Region 7 along the Blue Ridge. The Appalachian Trail Conservancy (ATC) has member clubs that voluntarily work with federal, state and local governments and numerous individual landowners to solve problems associated with the acquisition, development, administration, management and maintenance of the AT. Local and regional partnerships with NPS and ATC should continue to protect the setting and viewsheds along the AT to preserve this outdoor recreational experience and reputation as a footpath in the wilderness. Consideration should be given to finding ways to disperse the users, balance conflicting uses and providing for visitor needs.

2 Regional and local organizations should complete the development of the **Great Eastern Trail** through the Allegheny Mountains to link existing trails from central Alabama to central New York along the Allegheny Highlands. This includes parts of the Tuscarora Trail (formerly the Big Blue) as it crosses Shenandoah and Frederick counties. Efforts should be continued to relocate the Tuscarora Trail off public roads and provide additional protection for the relocated sections.

Other trails

3 The NPS Rivers and Trails Conservation Assistance Program (RTCA) should continue assistance with development of a regional green infrastructure strategy. RTCA should also work with the Shenandoah Valley Battlefields Foundation, Civil War Preservation Trust and Virginia Department of Game and Inland Fisheries (DGIF) to develop and protect the **Redbud Run Greenway** near Winchester. Opportunities should be pursued to link the Redbud Run Greenway with the **Green Circle Greenway** and protect land on the Second and Third Winchester battlefields in the Stephenson's Depot-Milburn Road corridor. Regional and local organizations should continue development of the Green Circle in Winchester that connects Abrams Creek Wetlands Preserve to Apple Blossom Mall and Old Town Winchester.

4 State, regional and local organizations and agencies should develop and construct a horse trail between **Blandy Farm** and **Long Branch Plantation**.

5 State, regional and local partners should develop the abandoned **Norfolk Southern Railway** between Edinburgh and Mount Jackson as a rail-to-trail and extend it along the rail corridor if additional rail sections become available.

6 NPS, state, regional and local organizations should develop a greenway along the **Shenandoah River** to connect the state and national park sites with other public resources.

Water access and blueways

A discussion of the water access in the Commonwealth can be found in Chapter VII: Outdoor Programs and Initiatives, Water Access and Blueways. Local and regional recommendations include:

- Regional and local agencies should establish cooperative agreements among localities, other agencies and private landowners to meet the increasing need for public access to recreational waters.
- Regional and local agencies should identify strategies to make additional waterfront resources available for public use.
- Regional and local agencies should provide adequate support facilities and services, such as restrooms, concessions, parking and maintenance for existing and proposed public water and beach access areas and the Jackson River Blueway.
- Regional and local agencies should acquire or maintain access to existing public beaches and water access sites that may be jeopardized by changes in land use or development activities.
- Regional and local organizations should implement the *Shenandoah River Use-Floating and Fishing Plan* for the Shenandoah Valley. This is a comprehensive plan for showcasing opportunities for river protection and use, while coordinating efforts of the Walking and Wheeling Plan for Region 7.
- 7 Regional and local organizations should develop a managed blueway system of public access and recreational use areas along both the **North Fork of the Shenandoah and the main stem of the Shenandoah River**.
- 8 Regional and local organizations should continue promotion, development and extension of the **upper South Fork of the Shenandoah River Blueway**.
- 9 State, regional and local agencies should provide additional and improved public access to all the major recreational streams of the region, including **Passage**

Creek and Opequon Creek. Where appropriate, portages should be created and maintained around dams and other river obstacles.

10 Regional and local organizations should develop a water trail along **Cedar Creek** highlighting its unusual natural features (limestone cliffs, endangered turtle habitat, eagle and other raptor habitat) and historic (battlefield) areas.

Historic and landscape resources

Consideration should be given to evaluating potential historic and landscape recommendations in this region. For more detailed information, see Chapter VII: Outdoor Programs and Initiatives, Historic and Landscape Resources. Local and regional recommendations include:

- Regional and local agencies should identify historic and archaeological resources that can be used for tourism, recreation and education. These resources should be included in local land use planning and decision-making processes to promote preservation and protection.
- Regional and local agencies should build local historic attractions, historical societies, museums and other tourism organizations in the region to include the Virginia Association of Museums, Virginia Civil War Trails, APVA Preservation Virginia, the Virginia Main Street Program and others to enhance local heritage tourism, educational and recreational offerings.
- Regional and local agencies should encourage local governments and private organizations that own historic properties in the region to manage properties effectively for long-term protection and to maximize public benefit consistent with the nature of the historic property.
- Regional and local agencies should recognize the multiple historic and cultural resources within the rural landscape through rural historic districts.
- Regional and local agencies should support the creation of other heritage area programs to promote tourism and preservation in distinctive regions.
- Regional and local organizations should continue implementation of the Shenandoah Valley Battlefields National Historic District Management Plan. This plan promotes the protection and continued appreciation of the historic, cultural and natural resources that are associated with the battlefields and are important to the people of the region, the Shenandoah Valley and the nation. Private land trusts and local, state and federal governments

should continue land conservation efforts that focus on the Second and Third Winchester, Kernstown and Cedar Creek battlefields in Frederick County; the Cedar Creek, Fisher's Hill, Tom's Brook and New Market battlefields in Shenandoah County; Cool Springs Battlefield in Clarke County; Cedar Creek Battlefield in Warren County; and the Overall Battlefield in Page County. Implement the *Fisher's Hill and Tom's Brook Battlefields Preservation Plan* completed by Shenandoah County and the Shenandoah Valley Battlefields Foundation in 2004.

- Regional and local organizations should support and develop awareness of the Mosby Heritage area through in-school education, brochures and marketing.
- Regional and local organizations should support creation of other heritage area programs to promote tourism and preservation in distinctive regions.
- Regional and local organizations should continue to support designation and protection of rural historical districts, including the one that connects Millburn Road and Red Bud Run.

11 Regional and local organizations should designate the historic **Valley Road**, Route 11, as a Virginia Scenic Byway. A corridor management plan should be developed, and a historic district for the protection of the scenic corridor should be created. A plan to make it eligible for National Scenic Byway designation needs to be developed. Consider its evolution from a Native American hunting path, to the Great Wagon Road, to Valley Turnpike, and finally to modern Route 11. Agricultural land along Route 11 corridor throughout the region should be protected.

12 Regional and local organizations should protect the historic and open space context of **Belle Grove** and **Harmony Hall plantations**, two valley icons within the Cedar Creek and Belle Grove National Historical Park. Each helps tell the story of the Valley Pike growth, along which it is located. Restore and develop the historic road that connected these two plantations as part of a historic road network in the region.

13 Regional and local organizations should maintain the historical integrity of **Long Branch**, a 19th century plantation. The site and its landscape needs to be protected.

14 Regional and local organizations should support protection of **Long Marsh Run Rural Historic District** in Clarke County and the lands within and adjacent to the district.

15 Regional and local organizations should support protection of **Greenway Rural Historic District** in Clarke County and the lands within and adjacent to the district.

Scenic resources

Consideration should be given to potential scenic recommendations in this region. For more detailed information, see Chapter VII: Outdoor Programs and Initiatives, Scenic Resources. Local and regional recommendations include:

- Regional and local agencies should develop corridor management plans for scenic byways, blueways, greenways and scenic rivers to assure preservation of the scenic quality of the corridor.
- Regional and local agencies should protect the scenic value of lands adjacent to publicly owned properties, as well as the scenic value of working agricultural and forestal areas key to maintaining a sense of place and economic vitality of the region. Scenic attributes to be considered include:
 - Encourage development away from mountaintops to protect significant vistas.
 - Consider timber harvesting impacts on key viewsheds.
 - Protect viewsheds along river corridors and scenic byways.
 - Create scenic overlooks and vista cuts along Virginia byways and scenic highways to enhance the visual experience of traveling.
- Lands adjacent to federal, local and state properties, scenic resources and working agricultural and forestal lands for maintenance of visual resources should be protected.
- Scenic overlays for the Shenandoah Valley National Battlefield Historic District, the Shenandoah National Park, the AT and GW-Jeff National Forests should be considered as part of a multi-regional viewshed planning process, creating a trail buffer for viewsheds and environmental resources. The National Park Service has developed viewshed management and landscape design guidelines that may be useful in this endeavor.
- Regional and local organizations should make the protection of mountain ridges a priority.

16 High priorities have been set by the ATC to protect and conserve the viewshed of the **Snickers Gap** area.

17 Ashby Gap and Manassas Gap are high priorities for protection by the ATC.

18 Regional and local organizations should protect agricultural land, especially along the **Route 340** corridor in Warren and Page counties.

19 Regional and local organizations should protect and preserve the scenic areas along **the north and south forks of the Shenandoah River**.

20 Interstate 81 is a recognized scenic corridor by the American Automobile Association. It is a major gateway and travel corridor through the state. Care should be given to protect this great resource and showcase of Virginia.

Scenic highways and Virginia byways

Opportunities to traverse Virginia's scenic and cultural landscapes are enhanced through nationally recognized designation. For more detailed information, see Chapter VII: Outdoor Programs and Initiatives, Scenic Highways and Virginia Byways.

On September 22, 2005, four Virginia roads were given national byway designation. The Skyline Drive, within Regions 6 and 7, received National Scenic Byway status. This designation allows localities along the route to access federal dollars for byway corridor projects (see Chapter VI: Grant Opportunities for Outdoor Recreation, Open Space and Conservation). These major scenic highways attract tourists from throughout the nation, as well as international visitors. Protection of the viewsheds and natural, historical and cultural resources is critical to the continued beauty and unique character of these corridors and their environs, as well as their economic benefits.

- Development of a Virginia Karst Trail is recommended to help educate the public about karst resources in the Commonwealth. This thematic trail will promote resource management goals and best management practices that help landowners protect sensitive karst resources such as caves, springs and sinkholes. The trail will focus on above ground features and tourist caves throughout the state's valley and ridge physiographic province. The Virginia Karst Trail, endorsed by the Virginia Region of the National Speleological Society and the Virginia Cave Board, will benefit the state through increased educational, commercial and tourism opportunities.
- Regional and local agencies should recognize and nominate scenic roads for designation as Virginia byways.

- Regional and local agencies should partner with other state, local and professional organizations to develop corridor management plans to protect the scenic assets of byway corridors.
- Regional and local agencies should incorporate Virginia byways and scenic highways into local comprehensive plans and zoning ordinances to ensure viewsheds are conserved and the sense of place retained along these corridors.
- Regional and local agencies should support designation of nationally qualified historic corridors to increase civic engagement and foster heritage tourism.
- Protection of Skyline Drive, a recently designated National Byway and one of the major scenic and economic resources of Region 7, is an integral element of Shenandoah National Park. The vistas and natural and cultural resources of the park create a peaceful and convenient refuge for visitors. Skyline Drive has recently seen several of its sections altered. Once breathtaking vistas of farmsteads or forests are now obscured by haze that originates from distant sources and reveals industrial and commercial developments and expanding suburban residential development. As development continues to expand in these sensitive areas near the park, there will be major impacts on the quality of the visitor experience. Those communities that benefit most from the presence of the park with its scenic highway should strengthen local comprehensive plans and create special zoning regulations to protect the unique scenic and economic benefits associated with the Skyline Drive and its viewshed.

The following road segments have been recommended for consideration as Virginia Byways:

- 21 Route 55** heading west from Front Royal and Route 340 crossing the peninsula near Riverton at the entrance to Front Royal.
- 22 Route 42** from near Forestville in Shenandoah County to near Harrisonburg in Rockingham County, as well as the section south of Harrisonburg to the Augusta County line.
- 23 Route 678** in Shenandoah County between Route 675 and Route 55 near Strasburg.
- 24 Route 11**, the historic Valley Road, or alternate routes as appropriate.
- 25 Routes 340 and 211** in Page and Shenandoah counties.

26 **Route 211** in Shenandoah County.

27 **Routes 628, 622, 600, 690 and 681** in Frederick County.

Scenic rivers

For detailed information about the Virginia's Scenic Rivers Program and its purpose, benefits and designation process, see Chapter VII: Outdoor Recreation Programs and Initiative, Scenic Rivers. In Region 7, the Shenandoah River from the Warren-Clarke County line to the state line is the only designated scenic river.

Regional and local recommendations include:

- Localities should adopt planning tools (e.g., land use overlays, corridor management plans) that will afford special recognition and protection to Virginia's scenic rivers.
- The North Fork of the Shenandoah, the South Fork of the Shenandoah, Cedar Creek and two segments of Passage Creek were identified in the *U.S. Forest Service (USFS) Revised Land and Resource Management Plan* as eligible for study for National Wild and Scenic River System designation. DCR should work with NPS or USFS to designate qualified rivers as part of the National Wild and Scenic River System.

The following river segments have been evaluated and found to qualify for designation as Virginia Scenic Rivers:

28 The **North Fork of the Shenandoah River** from Burnshire Bridge to Cedar Creek at Strasburg.

29 The **South Fork of the Shenandoah River** from Goodes Mill to Overall.

The following river segments are potential Virginia Scenic Rivers and should be evaluated to determine suitability for designation:

30 The **South Fork of the Shenandoah River** in Rockingham, Page and Warren counties from Port Republic to Route 684, and from Overall to the confluence of the north and south forks of the Shenandoah in the historic Riverton section of Front Royal.

31 The **North Fork of the Shenandoah River** in Shenandoah and Warren counties from Cedar Creek to Front Royal and from New Market to Burnshire Bridge.

32 **Cedar Creek** in Shenandoah, Frederick and Warren counties in its entirety.

Watershed resources

For information about Virginia's watershed programs, see Chapter VII: Outdoor Programs and Initiatives, Virginia's Watershed Programs.

Region 7 is in the Shenandoah and Opequon watershed, which flows into the Potomac and then into the Chesapeake Bay. The water quality of this watershed is critical to the health of the Potomac and the Bay. With the recent challenges from diminished water quality and fish kills, attention to the health of the watershed has increased due to its influence on the recreational and economic vitality of the region.

Watershed groups in Region 7

- Alliance for the Chesapeake Bay
- Burwell-Van Lennep Foundation
- Chesapeake Bay Foundation
- Friends of the North Fork of the Shenandoah River
- Friends of the Shenandoah River
- Page County Water Quality Advisory Committee
- Piedmont Environmental Council
- Pure Water Forum
- Shenandoah County Water Resources Advisory Committee
- Shenandoah Pure Water Forum
- Shenandoah Valley Regional Water Resources Policy Committee
- Virginia Conservation Network

Watershed recommendations for this region include:

33 Regional and local organizations should protect the **Overall Run** watershed and wildlife corridor.

Environmental and land stewardship education

For detailed information on Environmental and Land Stewardship education, see Chapter VII: Outdoor Programs and Initiatives, Environmental and Land Stewardship Education.

- Local and regional environmental education organizations should assess the outdoor environmental education facilities existing in this region.

Federal programs

For information on federal programs affecting Virginia's outdoor recreation and conservation opportunities, see Chapter IX-A: Resource Agencies. Local and regional recommendations are listed by agency.

National parks

- Local and regional government, user groups and nonprofits should work with NPS to revise policy that allows mountain bikes to use appropriate national park trails.
- The RTCA Program should complete and implement the *Bicycle and Pedestrian Mobility Plan* in conjunction with partners, the City of Winchester and Frederick County. The plan will be coordinated with the region's *Walking and Wheeling Plan*.
- The landscapes of the valley, its natural beauty, farm, small towns and tradition makes it one of the most "characteristically American" regions in the country. More than 325 armed conflicts took place in the eight northwestern Virginia counties (including Highland, Rockingham and Augusta counties plus the cities and towns in Region 7 that comprise the Shenandoah Valley Battlefield National Historic District (SVBNHD)). According to the battlefield's general management plan, approximately 70 percent of the core areas identified in the management plan retain their original integrity, while only a portion of those areas are in some way protected. The partners should continue to protect the critical resources of the district, before the key resources are compromised by development pressures. Further, the plan includes recommendations that need to be implemented in order to protect fragile resources, provide visitor information services, interpret sites and identify battlefield tour routes that enable visitors to travel among the visitor service centers.

34 **Shenandoah National Park and Skyline Drive** have high visitation, which taxes some of the park's prime recreational resources during peak periods. This is leading to over-utilized resources and user conflicts. The staff is considering several infrastructure improvements to existing areas within the park. The park is also dealing with a number of significant threats to the health of the park's environment such as outbreaks of diseases and insect infestations that are decimating large tracts of valuable forestland. Problems associated with the overpopulation of certain wildlife species, including the white tail deer, and the loss of scenic vistas due to declining air quality, need to be addressed by NPS. U.S. Congress fixed the park at its present size, precluding adjustments to the park boundary and preventing the resolution of

some land use conflicts at the park boundaries. All of these factors are impacting the availability and quality of recreational resources for future park visitors. Strategies in the park's revised resource management plan should be implemented to address these issues.

35 The NPS should consider bicycle and pedestrian access across the Blue Ridge mountains along **Route 611** or along **Skyland Road**.

36 **Cedar Creek and Belle Grove National Historical Park** should continue to work with state and local partners to update and develop a general management plan to guide park management for the next 20 years. The plan is scheduled for completion in 2008. As infill for the park progresses, NPS should partner with localities to seek out opportunities for additional land to protect from development and to provide adjacent lands to meet local recreational needs.

National Forests

- The USFS should continue to develop new partnerships to market recreational opportunities and rural economic development through tourism. USFS should work with DCR, Shenandoah Valley Tourism Association, and the Virginia Tourism Corporation to develop regional and international marketing strategies to showcase Virginia's outdoor recreation opportunities.
- The USFS should continue implementation of the *GW-Jeff National Forests Revised Land and Resource Management Plan*, which identifies additional resources necessary to support the existing demand for dispersed recreational opportunities in the forest. The revised goals and objectives call for the forest to operate with a more balanced approach, with open space, conservation and recreation to have equal weight with other forest activities. Additional facilities called for by the forest plan include trails, camping, water access, natural resource interpretation and environmental education.

Other federal lands

37 The **Conservation and Research Center**, near Front Royal, contains several thousand acres and is operated by the Smithsonian Institution's National Zoological Park. Activities at the center focus on biodiversity conservation through programs in research, national and international training, and captive breeding of endangered species. The Conservation and Research Center is closed to the public, however, conference facilities are available for use by outside groups on a fee basis. Localities should take advantage of the unique meeting facilities available at the center.

State facilities and programs

For a discussion of state facilities and programs throughout the entire Commonwealth, see Chapter IX-B: Resource Agencies. Local and regional recommendations are listed by agency or program.

State parks

- The need exists for additional state parkland in this region of the state. Potential acquisitions should be explored in Frederick or Clarke counties.

38 Raymond R. “Andy” Guest Jr. Shenandoah River State Park (1,605 acres), located in Warren County, has 5.6 miles of frontage along the South Fork of the Shenandoah River. The rolling terrain, steep slopes and wide floodplains provide scenic vistas of Massanutten Mountain to the west and Shenandoah National Park to the east. The park was acquired with funds from the 1992 General Obligation Bond (GOB), which also included funds for minimal development. The park offers primitive camping, picnicking with 4 large shelters, fishing, car top boat launch, and more than 13 miles of hiking and multiuse trails. Environmental education and interpretive programs are available seasonally and for school groups in the spring and fall. Through the 2002 GOB, funds have been allocated to construct a road, full service campground and cabins in accordance with the park master plan. Funds were also allocated to construct an office-visitor center complex. The park has established a visitor center advisory committee comprised of community, education and government representatives to help develop an interpretive theme and generate support for designing and installing displays in the proposed visitor center.

39 Seven Bends State Park (1,066 acres), located in Shenandoah County, is located on the North Fork of the Shenandoah River. This park was acquired through donation and with funds from the 2002 GOB. The master plan is under development and should be completed in early 2008. The park has approximately four miles of river frontage and is bounded by the national forest to the west. This provides numerous cooperative opportunities for trail linkages with the national forest. Master plan recommendations should be implemented as soon as possible.

State fish and wildlife management areas (WMA)

- DGIF should continue to work with local and regional governments to support the Birding and Wildlife Trail program.

- 40** DGIF should continue to investigate opportunities at the **Red Bud Run WMA** to acquire in-holdings and to improve the area with trails and other structures for wildlife viewing and other outdoor recreation.

State forests

- Local and regional agencies should encourage the use of Department of Forestry (DOF) Best Management Practices in floodplain forest areas, particularly those adjacent to state-designated scenic waterways.
- Local and regional agencies should use DOF properties as field classrooms to help with educational programs.
- Local and regional agencies should coordinate with DOF and seek the assistance of local trail and river user organizations to develop forest trails and publish maps for each state forest, as well as establish greenways and blueways for public use.
- Local and regional agencies should investigate opportunities to acquire fee simple ownership or easements to conserve working farms and forests in the region.
- Local and regional agencies should work with DOF to create defensible space around buildings to reduce the risk of wild fires through the DOF Fire Wise Program.
- Localities should work with DOF on education and monitoring of tree diseases and other pests that could weaken the forested environments.
- Agricultural lands should be targeted for reforestation to protect the water quality of the area and limit the effects of erosion on these lands.

State natural area preserves

As of November 2006, there are no natural area preserves in Region 7. However, DCR is working closely with conservation partners to establish a preserve around Ogdens Cave in Frederick County.

DCR has, as of November 2006, documented 408 occurrences of 166 rare species and natural communities in the Northern Shenandoah Planning District. Thirty-six species are globally rare and five are federally threatened or endangered. Eighty conservation sites have been identified in the district; 60 (75 percent) have received some level of protection through ownership or management by state, federal and non-government organizations. However, only 24 sites are protected

well enough to ensure the long-term viability of the rare species and natural communities they support.

DCR recommends that all unprotected conservation sites, and all unprotected portions of partially protected sites, be targeted for future land conservation efforts. The appropriate method of protection will vary with each site but may include placing the site on Virginia's Registry of Natural Areas, developing a voluntary management agreement with the landowner, securing a conservation easement through a local land trust, acquiring the site through a locality or local land trust, dedicating the site as a natural area preserve with the current owner, or acquiring the site as a state-owned natural area preserve.

Within Region 7, DCR is particularly interested in protecting:

- Protecting significant caves and karst areas.
- Protecting habitat for the state-threatened wood turtle.

41 Continuing land conservation and water quality protection efforts along **Buffalo Marsh Run** and around **Ogdens Cave** in Frederick County.

Other state lands

For a discussion of other state lands, see Chapter IX-C: Resource Agencies.

The following state-owned lands contain significant undeveloped open space that may have some potential for local recreational use. Each site should be assessed and, where appropriate, a cooperative agreement should be developed to make these resources available for local use as parks and open space.

42 **Blandy Farm and State Arboretum** in Clarke County houses the State Arboretum of Virginia on more than 150 acres. Local visitors and tourists hail Blandy Farm for quality experiences and memorable visits. The Blandy Farm and State Arboretum should continue implementation of plans for an information and visitors center, an amphitheater, picnic facilities, gardens and garden walks accessible for people with disabilities.

43 The **Northern Virginia 4-H Center**, located in Warren County, has numerous trails and other facilities that are used by others, including hikers on the nearby AT. There may be an opportunity for the 4-H Center to develop a cooperative agreement with other groups to further expand offerings at the site.

Transportation programs

- Local and regional agencies should develop alternatives to the use of private automobiles for daily activities. Transit systems, bicycle and pedestrian accommodations, improved community design, as well as a change in people's attitudes toward transportation alternatives will be needed for the transportation system of the future to meet capacity needs and energy constraints.
- Local and regional agencies should work with the Virginia Department of Transportation (VDOT) to implement Context Sensitive Solutions that accommodate multiple transportation modes.
- Local and regional agencies should recognize the need for a network of low-speed, low-volume roadways used by equestrians, pedestrians and cyclists, and they should include protections for this network in their comprehensive plan.
- Local and regional agencies should encourage the development of a permanent process for integrating the recommendations of local public health agencies, and they should include "active living" opportunities into all phases of transportation planning, land use planning and project design.
- Local and regional organizations should maintain and pursue coordinated implementation of *Walking and Wheeling the Northern Shenandoah Valley - The Plan for Improving Local-Regional Pedestrian and Bicycle Access and Linkages for Recreation and Civil War Heritage Tourism*.
- Local and regional organizations should complete and implement the *Bicycle and Pedestrian Mobility Plan*.
- Local and regional organizations should implement the Main Street bike plan for Berryville and Clarke County.

Local and regional parks and recreation departments

For a discussion of local and regional parks and recreation departments, see Chapter IX-D: Resource Agencies. Local and regional recommendations include:

- Explore reclamation of abandoned landfills into new and needed parks.
- Consider cooperative management for the recreational use of private, corporate, state or federally

owned lands in order to increase local access and meet outdoor recreation needs.

- Local government should implement the Front Royal Parks and Recreation Plan for Front Royal, *Where the Mountains Meet the River*.

44 Shenandoah County should implement the Keister Tract Master Plan for county's recently purchased 150-acre parcel **near the confluence of the North Fork of the Shenandoah River and Cedar Creek**. The critical location on the river, in close proximity to the national forest and adjacent to Belle Grove-Cedar Creek National Park, will give the park a regional significance that can support a variety of recreational opportunities for the people of the area.

45 The superfund **Avtex Fibers Plant** site on the Shenandoah River at Front Royal is being redeveloped into a "green" industrial park. A recreational park, Conservancy Park, is part of the site rehabilitation and consists of almost 350 acres fronting the river. Park developments will include access to the river, restroom facilities, picnic areas, natural areas and open space, a trails network and a variety of other day-use activities, including soccer fields. Conservancy Park could help address issues identified in the recreational use management plan. Funding should be made available as part of the mitigation plan, and the site should be developed as an early phase of the rehabilitation, which currently has some soccer fields on it.

46 Front Royal should establish a park area **along the South Fork of the Shenandoah River** to provide public river access and to preserve the mountain and river vistas looking west from the South Fork bridge.

Private sector

Much of the demand for outdoor recreation is met by the private sector. Because of the abundance of water resources in the region, there are a number of water-based recreational opportunities that could be explored. For a discussion of private sector role, see Chapter IX-E: Resource Agencies.

Within Region 7, entrepreneurial opportunities exist for the establishment of outfitter services for canoeing and kayaking, boat launches, canoe-in campgrounds, multi-field sports complexes and swimming pools. Private landowners might consider fee-based hunting, fishing and boating access.

The private sector has played a major role in the establishment of the Northern Shenandoah Valley as a tourist destination. Resorts, such as Bryce, provide golf courses, pools, campgrounds, lodging and other amenities for the recreating public. Increased interest in the numerous Civil War battlefield sites, many of which are privately owned, has created new opportunities for the heritage-tourism industry. Private-public arrangements and partnerships are evolving to protect, promote and interpret the significant recreational, cultural and historic resources that are synonymous with the northern valley.

The increasing demand for camping, fishing and other water activities could prompt private investors to establish recreation and tourism-driven businesses. There is a need for additional all terrain vehicle (ATV) trails in the region, which may present opportunities for the private sector to create additional off-road trails. Bed and breakfast establishments may consider an initiative to protect scenic and agricultural land while promoting small business enterprises.



Working agricultural lands in Northern Shenandoah Valley. Photo by Nancy Sorrells.

Table X-7. Region 7 (Northern Shenandoah Valley Regional Commission) Existing and Projected Outdoor Recreation Needs

Activity	Activity Days	Demand	Units	Supply	2010 Needs	2020 Needs
Baseball	265,823	53	fields	39	14	23
Basketball	326,237	77	goals	61	16	30
Bicycling	286,968	20	miles	NI		
Mountain	47,325	3	miles	NI		
Other	239,643	17	miles	NI		
Lake, river and bay use (combined)	239,643	4,294	water acres	218	4,076	4,812
Power boating	113,579	2,738	water acres	S		
Sailing	16,110	139	water acres	S		
Saltwater fishing	56,789	319	water acres	S		
Jet ski, personal watercraft	36,249	568	water acres	S		
Water skiing, towed on water	16,916	530	water acres	S		
Camping	325,834	1,922	sites	3,210	-1,288	-959
Tent camping	186,277	1,099	sites	416	683	871
Developed camping	139,557	823	sites	2,794	-1,971	-1,830
Fitness trail use	167,146	13	mile trails	10	3	6
Fields (combined)	342,348	72	fields	47	25	37
Football	128,884	27	fields	47	-20	-15
Soccer	213,464	45	fields	-	45	53
Stream use (combined)	754,977	480	stream miles	348	132	214
Freshwater fishing	656,502	462	stream miles	S		
Human-powered boating	35,443	9	stream miles	S		
Rafting	20,138	4	stream miles	S		
Tubing	42,894	6	stream miles	S		
Golfing	254,546	9	courses	207	-3	-1
Hiking, backpacking	317,175	163	trail miles	474	-311	-283
Horseback riding	90,621	39	miles	211	-172	-165
In-line skating	54,373	4	miles	NI		
Jogging, running	1,308,977	105	mile trails	NI		
Nature study, programs	55,380	8	sites	2	6	7

Note: Demand multipliers used to create this chart are based on the Virginia Department of Conservation and Recreation's 2006 *Virginia Outdoors Survey* as measured at the regional level. Additional analysis is required to adjust these results for local conditions.

NA: not applicable, no standard needed

S: same as combined

NS: not inventoried separately

NI: not inventoried

(-) indicates surplus

Table X-7. Region 7 (Northern Shenandoah Valley Regional Commission) Existing and Projected Outdoor Recreation Needs – continued

Activity	Activity Days	Demand	Units	Supply	2010 Needs	2020 Needs
Picnicking away from home	274,885	714	tables	2,657	-1,943	-1,821
Skateboarding	153,050	47	sites	NI		
Snow skiing or snowboarding	34,436	1	ski lifts	3	-2	-2
Softball	285,961	51	fields	63	-12	-3
Sunbathing, relaxing on beach	373,360	27	beach acres	17	10	14
Swimming	2,013,810	135		NI		
Outdoor area	1,010,933	104	beach acres	17	87	104
Outdoor pools	658,516	28	pools	33	-5	0
Indoor pools	344,362	4	pools	2	2	3
Tennis	157,077	98	courts	96	2	19
Used a playground	541,715	77	sites	83	-6	7
Visiting gardens	53,567	6	sites	NI		
Visiting historic sites	295,426	25	sites	NI		
Visiting natural areas	376,180	64	sites	NI		
Volleyball	94,649	28	courts	13	15	20
Hunting	646,433	106,008	acres	106,513	-505	17,666
Drive for pleasure	1,335,156	NA	NA	NI		
Driving motorcycle off road	54,373	25	miles	19	6	10
Driving 4-wheel-drive off road	227,561	NA	NA	NS		
Walking for pleasure	4,331,705	NA	NA	NI		
Bird watching	53,165	NA		NI		
Other	116,801	NA	NA	NI		

Note: Demand multipliers used to create this chart are based on the Virginia Department of Conservation and Recreation's 2006 *Virginia Outdoors Survey* as measured at the regional level. Additional analysis is required to adjust these results for local conditions.

NA: not applicable, no standard needed

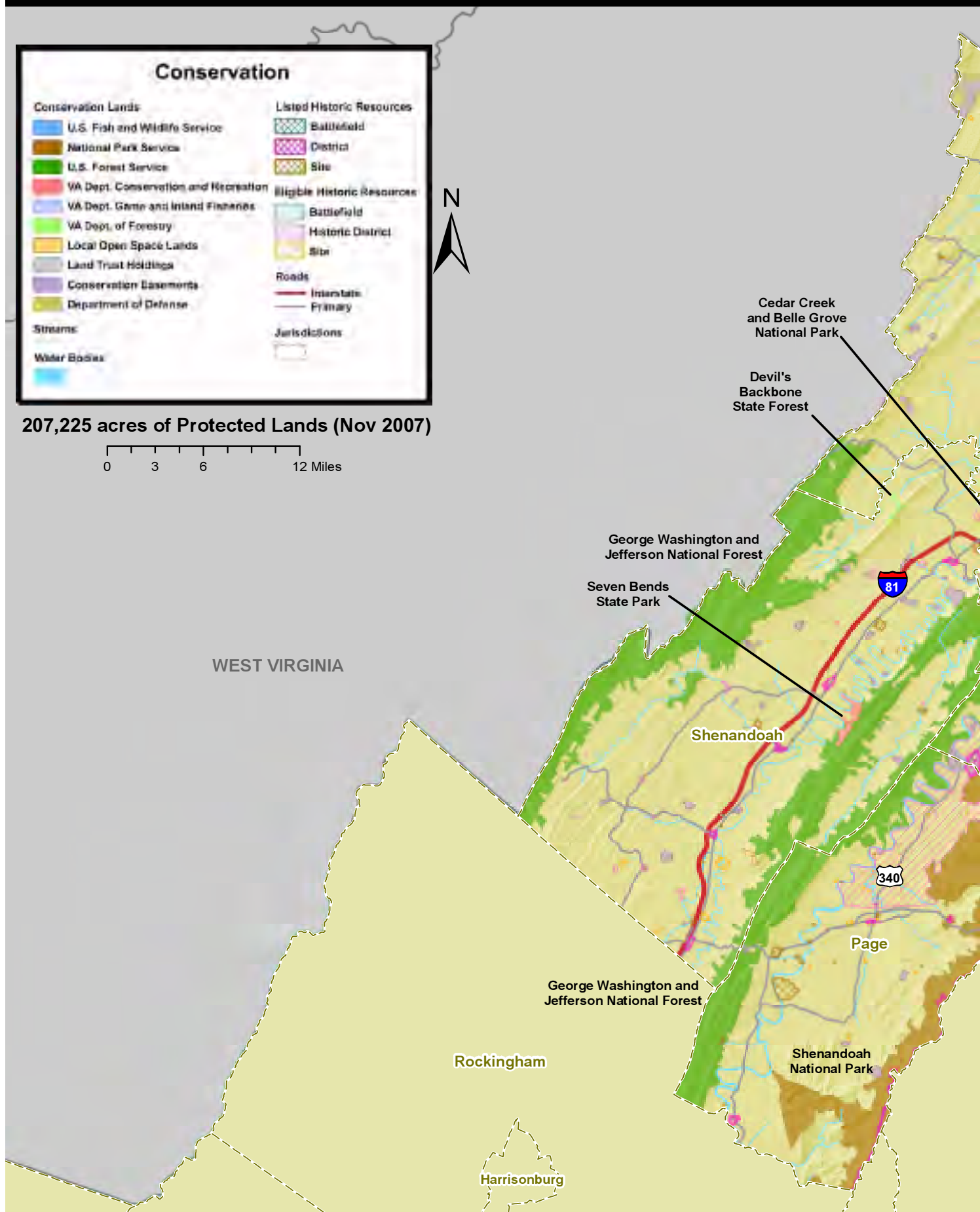
S: same as combined

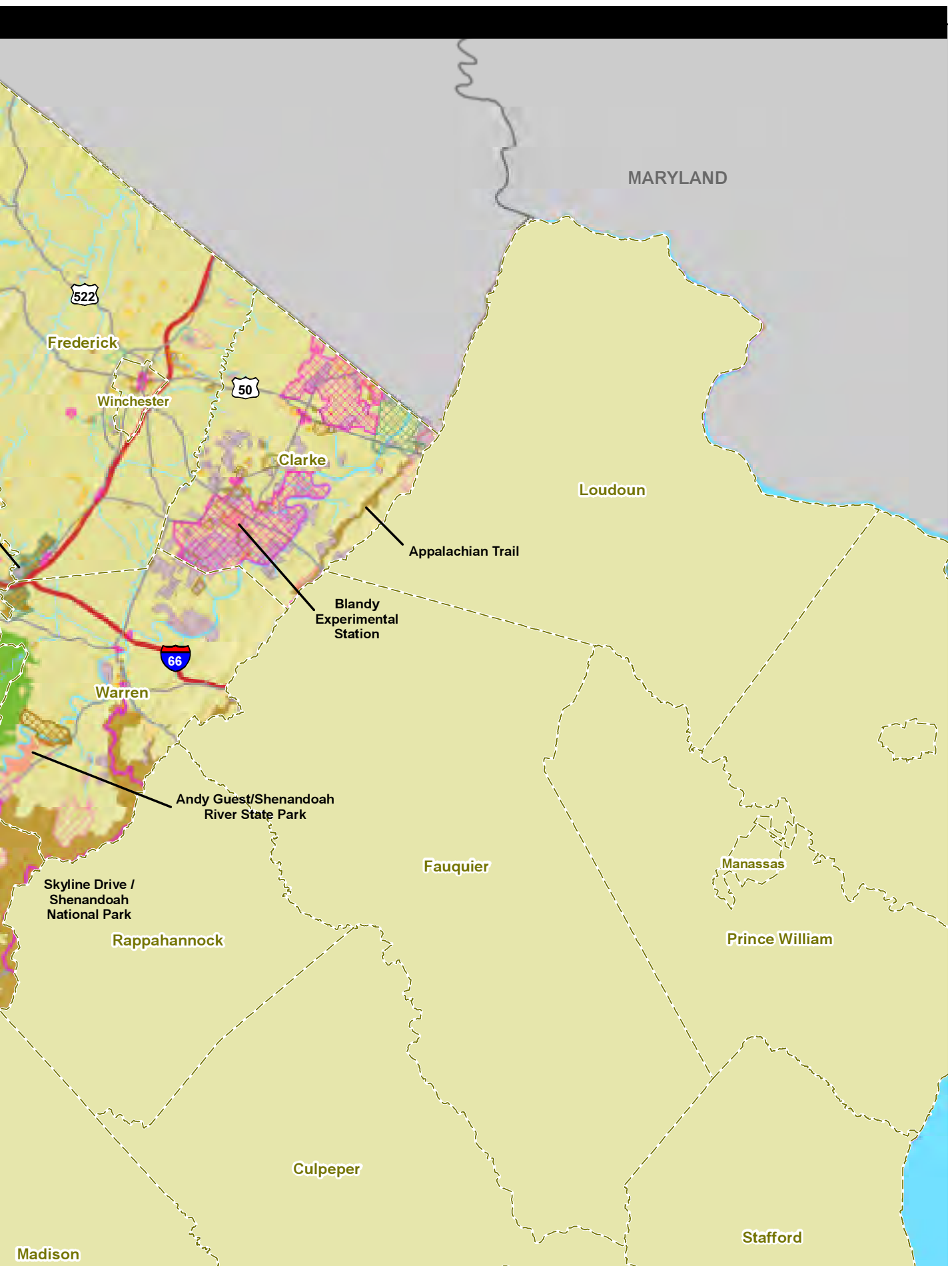
NS: not inventoried separately

NI: not inventoried

(-) indicates surplus

Map X-14. Region 7 (Northern Shenandoah Valley Regional Commission) Conservation Lands





Map X-15. Region 7 (Northern Shenandoah Valley Regional Commission) Outdoor Recreation

